### February 2012





Richard Ogden, Chairman

So here we are again at the start of another year. 2011 was undoubtedly a tough year for most of the economy and, of course, tough for most of the construction industry. So what will 2012 bring us? Well I guess that Benjamin Franklin had it about right when more than 200 years ago he penned those famous words: "In this world nothing can be said to be certain, except death and taxes."

The bottom line is that whilst all of us have perfect vision when looking backwards it is when we try to look forward that things have this unerring habit of taking us by surprise.

That said, it would be a remarkable turnaround if the economy suddenly started to boom. However, none of us think that this is going to happen this year or indeed in 2013. Unemployment is historically high, the public sector continues to shrink, access to capital is still difficult for many businesses, consumers have grown to be very cautious about taking on debt and the domestic housing market, which plays such an important part in stimulating overall economic activity in the UK, still looks fragile.

So what might this mean for the construction industry? Well you can read what the pundits are saying just as well as I can. Certainly there are reasons to be gloomy but there are also a number of practical and very positive signs. The Government's decision about HS2 will help but almost certainly not this year. The announcements about investment in infrastructure will help some sectors including in particular civil engineering. The plans for the Green Deal and the provision of public funds to underpin £1bn of housing loans for first time buyers may well help to get the housing sector moving.

The shortage of work has had the inevitable impact on construction prices and as a result now is a great time to invest in new construction. This applies just as much to domestic investments as it does to overseas money looking for a secure home in the UK. With interest rates on capital so low across much of the globe the opportunity to make secure long term investments in UK infrastructure looks increasingly attractive to many. This may well be reinforced by the current woes within the Euro Zone. although we should take no comfort from the uncertainty that is affecting our trading partners across much of the rest of Europe. Let's hope that these problems get sorted out just as soon as possible. Uncertainty plays absolute havoc with confidence, and surely none of us would deny that we are now firmly and irrevocably connected as part of a global village.

So what will 2012 bring for Buildoffsite and our passion to significantly increase the use of quality offsite construction solutions? You may be surprised to hear that I am cautiously confident that Buildoffsite will continue to make progress and, even more importantly, I believe that our Members will also continue to make progress. The tangible justification for feeling confident is that we are continuing to attract new Members – at a time of real pressure on resource this is a massive vote of confidence in what we can do collectively, and the simple and inexorable logic of the case for the increased use of offsite solutions. In all honesty, what's the alternative?

So what would help Buildoffsite? Clearly we would like to attract even more Members to support our shared work programmes, to refresh what we do and to help us ensure that we are delivering those practical services and opportunities that deliver business value. We don't seek Members for membership's sake – it is not a numbers game. We need Members who are prepared for cross-functional sharing between the existing and new Membership, and whose participation will strengthen our Membership. It's our challenge to make the case for Membership based not on access to an exclusive vested interest club, based not on rhetoric, but simply based on tangible business value.

From Government we enthusiastically welcome the decision to embrace Building Information Modelling (BIM) across construction procurement within the public sector. This is how just about all other industries manage their projects, and we believe that this is likely to have a number of highly desirable outcomes, including requiring the early integration of the supply chain and also serving to promote early decision taking in support of the increased use of offsite solutions. We welcome the Government's measures to stimulate excellence in construction procurement skills. With the public sector accounting for 40 per cent of construction spend, we should all support measures that ensure the client becomes more expert, and in response the industry becomes more efficient and as taxpayers we get better value for the money that is spent in our name. We support the priority that the Government attaches to sustainability and the drive for carbon reduction. Focusing on cost in use will, we believe, also play to the strengths of offsite solutions in a way that can't be matched by traditional construction methods! Possibly long overdue, all these developments are now in progress and cumulatively I am certain that they will underpin the case for offsite solutions.

At this point, let me express my thanks for the tremendous support that Buildoffsite enjoys from the Department for Business. The Department took the lead in the setting up of Buildoffsite and seven years on they are still actively supporting us, and mentoring our development and our service offerings.

During 2012 it is going to be vital that we continue to develop new services that provide tangible benefits for our diverse Membership. With the advice of our Direction Group we regularly report what we are doing and planning to do, and the reasoning that underpins those plans. We hope that we are doing a good job, but we are substantially dependent on our Members telling us what they need to help inform commercial decision taking and also dependent on our Members being willing to play a full part in exploiting those services. Our Members have been fantastic in their support but for 2012 I sense that we need to commit to making just that extra bit of effort. The case for the increased use of offsite is intuitive - it is how all other industries have evolved and construction need be no different. However, I believe that we will get to where we want to be a lot quicker if we all work together to make the business case.

Before I close let me say a few words about 2011. I believe that the Membership can be pleased with what we have collectively achieved. Our activities and progress were reported in our Year Book published at the end of the year. For a small organisation it is remarkable how much we are able to achieve, both in terms of the number of our activities and also the range of our activities. For me I would like to pick out just three highlights through which I believe we have started to raise our game to the next level.

**Member to Member** networking can deliver tremendous value to the Membership as well as giving rise to a lot of fun. The Member to Member event we held as guests of the Irish Embassy in London was rapid networking/speed-dating on an industrial scale. I think that "epic" would rank as a fair description of that event.

Our **Year Book**, which we published in November contained, for the first time, an initial set of case studies sourced from the Membership, which identified the



tangible benefits arising from the use of offsite construction methods assessed against the real world benefits of cost and time savings, quality, sustainability and health and safety. With the support of the Membership we will be doing a lot more of this, as nothing speaks louder than hard facts.

Finally, I just want to mention the Conference we jointly organised with RIBA on 30 November at their HQ. This was the best attended event that Buildoffsite has so far delivered, with more than 250 delegates drawn together to hear and debate some of the most exciting projects underway in the UK. Construction projects that are simply stunning in terms of quality, design and engineering excellence, and which are delivering incredible client value. The question I would ask is why can't construction always be this good? I must not forget that the featured projects also clearly indicated the way forward for the industry, with each having an offsite content of 80 per cent plus. It was an incredible experience and also a considerable achievement for a seven year old organisation like Buildoffsite to work with a 176 year old global institution, and we are confident that there will be more to come this year.

My very best wishes to you for success in 2012.



### **Events**

### Lean Project Management Workshop – 7 February 2012





Lean Thinking Ltd's unique, interactive spring workshop on 7 February is being held in collaboration with Buildoffsite and ISG, and will be delivered by Ali Mafi. It will include contributions from the Ministry of Justice, drawn from their experiences of applying the Lean Project Management system to their projects. The workshop will provide delegates with an overview of the most advanced project management system using Lean Thinking philosophies, in conjunction with methodologies such as the Theory of Constraint, Systems Thinking, Selfmanaging Teams, Integrated Planning and 6 Sigma. Each new learning point will be illustrated with reference to some of the UK's leading clients and contractors. The tangible business benefits of this unique system will also be demonstrated.

At a time of unprecedented economic challenge for the industry, the workshop will demonstrate the best system for radically improving performance and increasing value to clients, and at the same time improving competitiveness and profitability.

There will be an overview of how to:

- radically improve delivery against key criteria of time, cost and quality, simultaneously and without trade off
- maximise the predictability of the contract completion date
- optimise the project duration
- compress time, and in turn reduce cost and maximise competitive advantage

- absorb the impact of delay without affecting the end date
- radically improve integration and team working across the supply chain.

Lean Thinking's Ali Mafi has been working with some of the UK's leading construction clients and their supply chain partners for over 10 years, to help deliver substantial improvements in project completion time while also achieving significant cost reduction. The workshop has been developed for senior managers and decision takers from organisations representing clients (public or private sector), architects, consultants, contractors, sub-contractors, SMEs, modular manufacturers and suppliers. To date, these workshops have attracted more than 1,200 senior managers and executives from across the client and construction community.

### Rapid networking event, 13 October 2011

# buildoffsite O IRELAND

Buildoffsite's speed dating or, if you prefer, rapid networking events provide an opportunity for Members to take part in short introductory meetings with other Members and special guests. These meetings allow them to get to know each other a bit better and to start to build up an appreciation of respective and possibly complementary business needs and ambitions. The opportunities for taking the first tentative steps towards collaboration can provide considerable value to those taking part.

Buildoffsite has arranged a number of such events, which have taken place at various locations. However, the rapid networking event that took place on 13 October 2011 in the Ballroom of the Irish Embassy in central London must rank as one of the most prestigious venues as well as the best attended event to date.



This event came about through a collaboration between Buildoffsite and Enterprise Ireland with the latter securing the use and hospitality of the Embassy. The host for the evening was the Ambassador, Bobby McDonagh and was also attended by Jan O'Sullivan, the Irish Minister for Trade and Development, who had flown in especially to take part. Roger Bayliss, the CFO of Skanska, gave a scene setting presentation on key developments, priorities and opportunities within the UK construction sector.

About 60 Buildoffsite Members, along with several visitors from Irish construction businesses, took part in the networking which involved each guest taking part in a continuous series of short networking meetings with fellow delegates. With 30 meetings taking place at any one time, this was the busiest event that Buildoffsite has so far tackled.

Although the non-stop series of meetings provided a considerable test of stamina for those taking part, the response from delegates was incredibly positive with a great deal of follow on business activity being reported.

Buildoffsite is in discussion with Enterprise Ireland about future opportunities for networking and business to business activities where these will deliver mutual benefits. Towards Intelligent Construction Conference, 30 November 2011



The Conference, which took place on 30 November at RIBA's Jarvis Hall, was Buildoffsite's biggest event of 2011. Developed and delivered in collaboration with the Royal Institute of British Architects the event was attended by 250 delegates. The host was Angela Brady, RIBA's President, with Richard Ogden of Buildoffsite chairing the proceedings. The Conference was sponsored by Tekla and the Department for Business.

The Conference title – *Towards Intelligent Construction* – was chosen to reflect the need for the construction industry to adopt new and more effective ways of working, in order to offer better construction solutions and to deliver much better value for clients and customers. It is not about suppliers



making minor modifications at the margins but rather the need for a fundamental reshaping of the technologies, processes and relationships that are applied within the industry. This includes smarter build solutions including the increased use of offsite solutions, the application of the principles of design for manufacture and assembly, the use of lean production techniques to eliminate process waste and the increased and intelligent use of Building Information Modelling (BIM).



The need to ensure a quality built environment requires great architecture with architects able to take advantage of the opportunities that more efficient construction methods can offer to deliver genuinely stunning buildings, without the compromises that often result from the use of traditional construction methods.

The Conference featured two significant case studies, the first being the British Land project at 122 Leadenhall Street in the City of London. Commonly referred to as the "Cheese-grater", this stunning and technically challenging development is being constructed by Laing O'Rourke and will be completed six months ahead of schedule through the application of intelligent construction techniques, including the use of BIM, with the use of offsite manufactured components accounting for 85 per cent of the building.

The second case study featured the development programme of elective surgery hospitals by Circle Health Properties. This substantial investment

programme is characterised by the requirement for excellence in design, excellence in construction. excellence in use and excellence in customer experience. The expert client in collaboration with their supply chain is constantly challenging what it does and why it does it, as well as taking the learning points from each hospital project and applying the lessons to their next projects. This process ensures that tangible benefits in terms of more effective design and construction techniques, reduced cost of ownership, provision for adaptation, and the development of clinical and customer services are being achieved in a way that also ensures that waste in all its forms is being eliminated. The client's supply chain is deploying BIM both to manage the overall design and construction process and to drive efficiency in the building form.

Circle has already achieved a 30 per cent reduction in construction costs whilst delivering exceptional architecture and build quality. About 80 per cent of project value is being delivered through the use of offsite manufactured components and assemblies. This is a fantastic achievement, but Circle believes that there is much more value to be gained through close collaboration with an expert and committed supply chain.

There were also presentations on the future of BIM by Stephen Hamil, the Director of Design and Innovation, RIBA Enterprises, and on collaborative working and continuous improvement by Paul Fletcher, RIBA's Councillor and Chair of the RIBA Construction Strategy Group, Director Through-architecture.

The conference was very well received by delegates and the presentations and Panel Session stimulated some passionate and well informed debate. Feedback from delegates has been incredibly positive, both about the learning from the presentations but also about the value of a mixed design and construction community coming together to exchange ideas on meeting immediate challenges and on creating a better industry. This was the first time that Buildoffsite has collaborated in such a visible way with RIBA. We will shortly be meeting with Angela Brady and her senior management team to identify how we can jointly build on this achievement, and begin to flesh out a shared work-programme for 2012.

For more information go to: www.buildoffsite.com/downloads\_events. htm#30Nov11

### Tata's Sustainable Building Envelope Centre – Buildoffsite Discovery Tour





The Sustainable Building Envelope Centre (SBEC) is a £6.5m facility based in Shotton, North Wales. SBEC is jointly funded by Tata, the Low Carbon Research Institute (LCRI) and the Welsh Assembly Government.

SBEC is a workshop for learning, encouraging innovation in renewables and sustainability, including photo-voltaics (PV), and is based at the centre of the huge Tata complex.

SBEC houses a 100-seat lecture theatre and is surrounded by an exhibition area with a capacity for around 300 visitors. There are experts on hand to explain



how the various systems work and where in the UK they are being trialled. The aim of SBEC is to create a construction process that will enable the façade of buildings – both roof and walls – to be transformed from a passive energy conservation function into an active energy generation, storage, dissipation and management function.

Buildoffsite's *Discovery Tour* on 27 October 2011 hosted by Chris Crease of Tata was attended by 30 people. The tour included technical presentations and demonstrations on the various technologies being developed at SBEC, along with some wider presentations on Tata's capabilities and opportunities in this sector. Speakers at the event included:

- John Wood, Business Manager for Modular Systems, Tata. John is involved with the rail design sector working extensively on the Kings Cross Station redevelopment. Tata is also working with Costain on the £80m Reading Area Station Redevelopment, for CrossRail and for the Potters Bar Station. All of these projects involve offsite manufacture plus lean management and DFMA. John's presentation on TATA's detailed design for a 300,000 tonnes a year residual waste facility in Staffordshire explained how using BIM helped to significantly reduce clashes in earlier designs
- Daniel Pillai, Director, SBEC
- Mike Dixon, responsible for M&E, Tata.

Nick Brown, BASF Coatings spoke about the Nottingham House project. In January 2008, BASF completed the building of a demonstration house on the campus of Nottingham University. This project was designed to prove that affordable domestic housing can be built to the level 4 of the Code for Sustainable Development.

The presentations from the tour and more details on SBEC can be found at: www.sbec.eu.com/en/events/271011\_ build\_offsite\_event/

### Illustrating the business case for offsite solutions

The Buildoffsite Review 2012 published at the end of November included a set of case studies provided by the Buildoffsite Membership that illustrate the ways in which offsite solutions have delivered tangible project and other benefits to clients and customers.

The Review is available to Members as a hard copy and is also downloadable from: www.buildoffsite.com/pdf/Yearbook/bos\_ yearbook\_12s.pdf

The case studies are not simply about describing best practice but specifically address identified benefits against the five performance headings of cost, time, quality, sustainability, and health and safety, and cover a range of building and civil engineering applications mostly in the UK but also overseas. Offsite solutions are increasingly able to provide optimum construction solutions in all sectors of the market.



This first set of case studies did not claim to represent the very best examples of the benefits arising directly from the use of offsite solutions but simply to illustrate examples of the measured benefits that are being realised on a regular basis and which are readily transferrable to other projects. We believe that this is the first time that this sort of hard information has been made available to the market at large. Our ambition now is to develop the Buildoffsite website to showcase the case studies and to add more case studies provided on a regular basis by the Buildoffsite Membership. This will ensure that the reference set is always up to date, and reflects developments in the range and performance of offsite solutions and also takes due account of changes in regulatory and market requirements.

The Buildoffsite Membership is now invited to contribute additional examples of their case studies detailing the benefits of applying offsite solutions, as demonstrated by measured performance against one or more of the above categories. We would like this process to become a business as usual activity for the Buildoffsite Membership and we will work with you to ensure that the process is kept as simple as possible. The important thing is that the case study examples are refreshed and expanded to demonstrate the innovation and application that is underway within the industry.

For more information contact Anna Whiting: Email: anna.whiting@buildoffsite.com

Delivering client value and construction efficiency by being Lean, BIS Conference Centre, Victoria, 1 March 2012





Many of the challenges currently faced by the construction sector and construction clients point to solutions that can be described as requiring a "Lean" approach.

Whether it's focusing on delivering precisely what the client needs, optimising the design process, removing "waste" from all stages of the process, including the construction phase, ensuring the constructed item can be operated effectively, boosting profits, or simply "doing more with less" – all are "Lean" principles. Interest in Lean in the construction sector has grown in recent years. However, there is widespread acknowledgement that the construction industry is not yet fully exploiting the full potential of the approach.

We are delighted to host Daniel Jones, one of the world's authorities on applying Lean. He will illustrate what Lean Thinking has to offer construction.

Following Daniel's talk, there will be responses from major construction clients on the track record and some of the challenges of realising the full potential of Lean from civil engineering and building perspectives.

### Why you should attend this event

#### New to Lean?

- find out more about how applying Lean Thinking can affect your bottom line
- understand how Lean principles can be applied to construction.

### Already familiar with Lean?

- hear from one of the world's leading authorities on Lean
- gain a perspective on how the principles are being applied across a range of industries
- discuss how Lean relates and can help with other industry imperatives such as sustainability and BIM
- network with other Lean experts.



Build Lean. Transforming construction using Lean Thinking (CIRIA C696). Now available to purchase from: www.ciria.org

The Lean event is offered free to Buildoffsite members. For more information go to: www.ciria.org/SERVICE/Search2/Core/ Events/eventdetails.aspx?iKey=E12201

### **New Members**



### British Gypsum

British Gypsum, part of the Saint-Gobain group, is the UK's leading manufacturer and supplier of plaster, plasterboard and dry-lining systems. With a long history of providing innovative, cost-effective and reliable products that meet the demands of the construction industry, the company is renowned for its pioneering work in training, as well as its forward-thinking strategy on innovation and product development.

British Gypsum offers a range of innovative products and services, ideal for off-site manufacturing where consistency, reliability and material robustness are essential. Tangible benefits to the process include:

- manufacturing cost savings through process reduction
- consistency in product quality and dimensional accuracy
- product durability great for off-site applications
- certainty that products will comply with National Building Regulations
- adaptability and flexibility of products
- environmental sustainability with the British Gypsum Plasterboard Recycling Service.

British Gypsum provides an unrivalled technical service with a network of Saint-Gobain Technical Academies and UKAS accredited test centres offering substantiated test data to meet ongoing project requirements. This technical capability allows British Gypsum to offer bespoke products, developed with the customer to meet their needs exactly.

British Gypsum has a UK-wide distribution network allowing fast and easy access to our group product ranges.



Products	Services
Gypsum fibreboards (up to 6m x 2.5m)	Technical advice on system selection
Plasterboard (performance and cosmetic)	UKAS accredited test centres
Acoustic ceilings – tiles, planks and boards	Specification development and value engineering
Fire protection/ encasement boards	U-Value calculations
Jointing materials and gypsum plasters	Bespoke products and sizes
Metal partitions, lining and ceiling systems	Bespoke system solutions
Thermal laminate plasterboards	Composite loads
External sheathing boards	Flexible procurement options/routes



For more information or to discuss your specific project/construction needs, please contact Andy Higson, National Business Development Manager – Offsite Manufacture:

Tel (mob): 07811 274225

Email: andy.higson@bpb.com

Website: www.british-gypsum.com

# Eurobond-SkanDek: a new generation structural roof element

### eurobond Skan Dek



David Wallach, Product Manager, Eurobond-SkanDek

Eurobond-SkanDek has launched the proven SkanDek system into the UK and completed its first project at Heathrow airport.

The SkanDek System is based on a patented lightweight box girder beam that offers a real structural contribution to a building and an impressive spanning capability of up to 22m.

About 500,000m<sup>2</sup> of SkanDek elements have been installed in Europe in a wide



A 12.5m long SkanDek element being placed on the Heathrow snow blower storage building

range of building types. The system is fully tested and is the first lightweight roof system to have gained CE Mark status. The company has developed UK design programs and an extensive detail library, all with the backing of independent assessment by the Steel Construction Institute and award of their SCI Assessed standard.

The first UK project was the roof for an extension to the snow blower storage at Heathrow Airport. The requirement was for a clear span roof, fully finished and with the fastest possible installation. The roof was about 500m<sup>2</sup> and Eurobond-SkanDek supplied 12.5m long by 2.5m wide roof elements with a clear span of 11m and a 1.5m overhang. The elements were finished with single ply membrane and finished steel ceiling. The 500m<sup>2</sup> fully finished roof was installed in less than two days.



Typical build-up of a SkanDek roof element

SkanDek offers slender construction, stunning overhangs, increased floor grids, open space and light. It is designed as part of the building's structure and can reduce the cost of steel and concrete frames, and eliminate secondary steelwork. An increased SkanDek grid can save on foundations, and fewer columns will make the interior space more attractive and flexible.

Eurobond-SkanDek offers a full technical and design service to help clients, designers and contractors maximise the features and benefits of a SkanDek Solution. For further information about Eurobond-SkanDek contact Dave Wallach:

Tel (mob): 07881 958770

Email: David.Wallach@eurobond-skandek. co.uk

Website: www.eurobond-skandek.co.uk

### Invest NI

### Invest 💦 Northern Ireland



Building Locally Competing Globally

Margaret Cunningham Client Manager – Construction

As the regional business development agency, Invest NI's role is to grow the local economy. We do this by supporting new and existing businesses to compete internationally, and by attracting new investment to Northern Ireland. We are part of the Department of Enterprise, Trade and Investment, and provide strong Government support for business by effectively delivering the Government's economic development strategies.

Within Invest NI's construction team there is a recognition that offsite solutions has led the way in innovative thinking for the construction sector and underpins the drive to deliver exports within the sector. Invest NI is keen to promote the supply base within Northern Ireland at a national and international level through its association with Buildoffsite.

As such, Margaret Cunningham (Invest NI's Client Manager, Construction) is keen to host an event in Northern Ireland in the near future that will showcase what Northern Ireland offsite construction solutions has to offer.

In addition, Invest NI would like to welcome Nick Turberville, their new Business Development Director based in the London office. Nick also hopes to participate with Buildoffsite, and enhance the linkages between the Northern Ireland supply base and the GB construction sector.

For more information contact Margaret Cunningham:

Email: margaret.cunningham@investni.com

Websites: www.investni.com www.nibusinessinfo.co.uk.

### **Mott MacDonald**



#### Who we are

As one of the world's largest employee-owned companies, Mott MacDonald is a uniquely diverse £1bn global management, engineering and development consultancy, delivering leading-edge solutions for public and private sector clients across 12 core business areas:

- buildings
- communications
- education
- environment
- health
- industry
- international development
- oil and gas
- power
- transport
- urban development
- water.

#### What we do

We work with our customers and use our worldwide resources and experience to:

- plan, design, procure and deliver projects on any scale
- provide management consultancy built on technical know-how

- help shape and implement development policies and programmes
- advance sustainability and promote the wellbeing of the planet.

Our breadth of skills, sectors and global reach makes us uniquely placed to bring our customers:

- holistic, innovative thinking
- global experience with local insight
- world-expert practitioners
- multi-sector perspective.

#### Our skills and services

We provide our customers with award winning skills and services – backed by our quality, environment and safety systems and robust approach to managing risk.

We enjoy delivering projects of any scale and shape.

#### Our work

We are lead design consultant for civil, mechanical and electrical, environmental, traffic and utility works for the Victoria Station Upgrade. Building Information Modelling (BIM) is being used to manage the design and construction risk involved in enlarging and modernising one of London's busiest stations whilst maintaining passenger services. BIM is resolving an incredibly complex spatial puzzle so that new and old come together seamlessly.

Our construction economists have created LifeCYCLE, an industry-first cost and carbon modelling tool. The tool was used to compare the cost and carbon benefits of insulation and PV panels on a major refurbishment of Glasgow University's Hetherington Building. Insulation improved energy performance, but the reduction in energy costs did not cover the capital outlay. Results also showed that the reduction in operational  $CO_2$  emissions would be less than embodied  $CO_2$  from manufacture of the insulation board. By contrast, LifeCYCLE showed that solar photovoltaic cells had a positive impact on both whole life costs and  $CO_2$  emissions. Energy costs were reduced by £45,000 and  $CO_2$  by 173 tonnes over 20 years.

### **Network Rail**



Network Rail owns and operates Britain's rail infrastructure. We run, maintain and develop Britain's tracks, signalling system, rail bridges, tunnels, level crossings, viaducts and 18 key stations. Network Rail is a "not for dividend" company and all our profits go straight back into improving the railway. Our mission is to provide a safe, reliable and efficient railway fit for the 21st century.



When Network Rail took over the railway network in October 2002, we inherited a tired, worn-out infrastructure that had been starved of investment for many years. Network Rail represents a new beginning, a new vision and a new way of delivering Britain's railway. We are investing in our workforce and introducing new technologies. There are around 35,000 of us at Network Rail and we are working hard to improve every aspect of the railway. We have made enormous progress, and under our stewardship, the railway is already safer, more reliable and more efficient.



We are ambitious for the future of the railway and wish to grow the railway, meeting the demands and aspirations of rail users. Our task now is to build on the progress we have made so that we can transform Britain's railway into a worldclass infrastructure.

For more information go to: www.networkrail.co.uk

### News

Skanska awarded £50m BREEAM Excellent Development Scheme in the City of London



Skanska's expertise in delivering premium commercial projects in London has secured the award of a £50m development in Bevis

Marks in the City of London. The client for the scheme is Bevis Marks Development Ltd, the shareholders of which are AXA Real Estate, on behalf of its Real Estate Opportunities Fund II, MGPA and Eurohypo. Bevis Marks Development has appointed CORE to manage the project on their behalf. The order was included in the company's order bookings for the fourth quarter of 2011.



To deliver the project, Skanska has put together an in-house team, combining its skills and expertise in construction, and mechanical and electrical service installations, piling and foundations, and utilities. Work on site to construct the 16-storey high quality commercial building, which includes retail areas, basement, basement mezzanine, ground floor and 15 upper floors totalling 22,000 square metres is due to start immediately, with completion in the autumn of 2013. The building has a target to achieve BREEAM Excellent and to deliver this, Skanska will incorporate elements such as combined heat and power generation, rainwater harvesting systems, energy saving lighting systems, condensing boilers, electronically commutated motors on fan coils and energy reclaim systems on AHU plant. All internal services will be controlled by a comprehensive building management

system to increase the overall energy efficiency of the building. Architects for the scheme are Fletcher Priest Architects.

Other key elements of the building works include:

- the reuse of existing piled foundations
- new piles
- structural steel and concrete frame, clad with curtain walling
- "green" roof coverings and a rooftop pavilion area, covered with a feature ETFE (Ethylene Tetra Fluoro Ethylene) roof structure
- new internal service installation, including generator back up for life safety services
- six passenger lifts and goods lift
- category A fit out to all office areas.

Paul Heather, Managing Director of Skanska's Building – London & South East Operating Unit, said: "Skanska are delighted to have been awarded the Bevis Marks scheme and to continue our well established working relationship with CORE. This project also allows us the opportunity to build new relationships with AXA Real Estate, MPGA and Eurohypo. Credit must be given to all parties involved in this project for their persistence over the past months to ensure we have reached the contract award. We look forward to working with Fletcher Priest Architects and Waterman Structures/ Services to deliver this BREEAM Excellent building during 2013."

### Skanska's new head office in Finland wins two awards

Manskun Rasti is a complex of four office buildings, including Skanska's Finnish head office, which is under construction at Ruskeasuo in Helsinki, Finland.

Manskun Rasti was the winner of the BIM Project category of the Tekla Global BIM Awards Competition 2011. It was acknowledged for the most complete use of BIM from the beginning to the end of the project. Among other things, the extensive use of the BIM and collaboration aspects were praised, as well as the use of IFC for project collaboration and communication for combining the models from different project parties.



The winners of the competition were chosen by a jury of the world's leading BIM experts, Professor Charles Eastman from the Georgia Institute of Technology, Björn K. Stangeland, CEO of DDS and Product Manager for buildingSMART International, Viktor Várkonyi, CEO of Graphisoft, and Wayne Morrison, Pre-Construction Manager from the Herrick Corporation. Tekla was represented by Risto Räty, Executive Vice President.

The jury commented: "Skanska has done pioneering work by utilising a highly detailed building information model at every step of the building and construction process with outstanding results. BIM was used in an exemplary way for maximized collaboration. The project was managed based on the model, with all disciplines utilising the modeled building information.

In addition, a panel of judges invited by the Rakennuslehti trade journal selected Manskun Rasti as Site of the Year 2011. The strengths of the project were the use of information modeling as a production tool, investment in occupational safety and the well-developed use of prefabrication in the building technology.

According to the panel, one of the reasons Manskun Rasti came out on top in the competition was because of occupational safety. All visitors to the site are inducted into occupational safety through videos in Finnish and English, and all are given appropriate protective equipment. Within the framework of production planning, innovations promoting occupational safety included the 42-tonne roof of the "Atrium", the central lobby at Skanska's head office, which was constructed on the ground and lifted into position in a complete state. In this way, it was possible to avoid many work stages, in which workers would otherwise have had to work at dangerous heights.

Jarkko Muurimäki, Regional Director from Skanska Talonrakennus Oy, said that Manskun Rasti has succeeded wonderfully both in basic site matters and in the development of innovations: "All the time the site has progressed in accordance with financial and timetable targets, and the good atmosphere that has prevailed there and the clear division of labour has made work easier." Muurimäki is especially appreciative of Pentti Holm. Site Foreman. for whom Manskun Rasti is his third Site of the Year accolade. Holm Said: "On this site we have done things in a new way. This victory shows that we have concentrated on the right things."

Skanska Talonrakennus Oy's Production Unit Manager Jussi Ranne emphasised



that, more than anything else, the site staff is behind this achievement: "A fantastic team has been responsible for Manskun Rasti. The members of the team are skilled, motivated and committed to their work, and without them this honour could not have been achieved."

Manskun Rasti, which is being built at the junction of Mannerheimintie and Hakamäentie, comprises four office buildings, the first of which Skanska's Finnish head office is moving to. The project developer is Skanska Commercial Development Finland. The first stage of the contract will be completed next year, including two eight-storey office buildings. The total area of the office buildings will be 33,000 floor m<sup>2</sup>.

"As project developer and investor, we are very happy that the constructor's attention to process development has been recognised," said Jukka Pitkänen, Managing Director of Skanska Commercial Development Finland. "One of our shared aims is also to obtain a platinum-level LEED® environmental certificate for Manskun Rasti."

The Rakennuslehti trade journal has been awarding the prize of Site of the Year since 1986. So 2011 is the 25th anniversary of the competition. Manskun Rasti has brought Skanska its eighth victory in the competition.

## NG Bailey announces fifth annual sustainability report



Leading engineering, IT and facilities services business NG Bailey has released its fifth annual sustainability report following a successful year of carbon reduction. The report details the company's successes in sustainability and demonstrates how it remains committed to a sustainable future. Produced as two separate documents, one report looks at the company's sustainability goals and future plans, while the other gives an insight into the sustainability offering available to customers.



Cal Bailey, Sustainability Director

In 2010, NG Bailey put in place its Target 2012 sustainability programme, committing to reduce costs, carbon, waste to landfill and water by 2012. The campaign has played a significant role in the group's carbon reduction, owing to a 13 per cent carbon reduction throughout the organisation's operations and an 18 per cent  $CO_2$  reduction in its estate buildings already. This success puts the company in a strong position to achieve its goal of a 20 per cent  $CO_2$  reduction by 2012.

Cal Bailey, Sustainability Director, plays a pivotal role in the sustainability of the company and is delighted with the results that NG Bailey has seen so far. He said: "It is exciting to be part of a company that has so much vision. Sustainability is vital for future growth and success, and NG Bailey is at the forefront of new processes and technologies."

NG Bailey's 2011 Sustainability Report is available to download from: www.ngbailey.com/sustainabilityreport

# NG Bailey wins landmark contract in power sector

NG Bailey has been contracted to provide engineering services to an energy from waste plant in Lincolnshire, the first project of its kind for the company.

The contract, worth £3.3m to NG Bailey, includes mechanical, electrical, plumbing and fire engineering services to the waste bunker, boiler hall, turbine hall, office and visitor centre.

The project also includes the ventilation systems for the process areas and cooling to electrical rooms.



NG Bailey's engineering division was involved early in the project, working alongside the JV team of Cnim and Clugston Construction Ltd, to ensure that the building design was planned to exacting specifications for Lincolnshire Waste Partnership.

Working in collaboration, NG Bailey's IT Services division is also involved in the project, supplying data cabling and network connections to a number of areas within the building.

The company's offsite manufacture specialist has also been consulted to supply prefabricated solutions.

Mike Darlington, Managing Director for the Engineering division in the north and Scotland, said: "This project is a landmark win for NG Bailey and shows our growth into the power sector.

"It is the beginning of an exciting period of time for the company, as we look to grow in this sector."



David Hurcomb, Chief Executive, adds: "This contract award proves that despite tough economic pressures, NG Bailey has the strength and ability to succeed and break into new and expanding market sectors."

Pre-commencement on the project started in October 2011, with on site work starting in April 2012. The project is due for completion in December 2013.

## NG Bailey wins three significant contracts in Scotland

NG Bailey has been awarded two contracts in Glasgow and one in Edinburgh, totalling three Scottish contracts in seven days. Working in partnership with various main contractors, NG Bailey has been contracted to provide mechanical and electrical fitout to Project Elegance in Edinburgh, and George House and the Copenhagen Building in Glasgow.

The work, which totals more than £4.5m to NG Bailey, includes the refurbishment of the full scope of mechanical and electrical services to George House, an existing building located in the heart of Glasgow's lively centre. Mike Darlington, Managing Director of the north and Scotland, said: "These contracts are a credit to the company's consistently high standards in the face of financial pressures. Scotland's success proves that our business strategy is strong and that our offering in the building services sector remains unbeatable. Our outstanding track record for delivering landmark projects across the country, and our commitment to excellence were no doubt key factors in us being awarded these projects."

### Modular construction aids Cambridge student development

The heart of student living



Unite Modular Solutions (UMS) Ltd has been appointed by McLaren Construction Ltd as

the specialist volumetric modular contractor for a new student accommodation development in Cambridge.

Brunswick House is located in the heart of the new landmark Cambridge Riverside Development and will boast the use of volumetric modular construction – the fasttrack design and factory manufacture of volumetric units in the form of lightweight steel frame technology that are then joined together on site – for all of its 346 modules.



Work on site started in July 2011 and UMS will begin production of the modules at its state-of-the-art Gloucestershire factory in December before delivering them to site.

Volumetric modular construction's ability to meet the strict deadlines required by McLaren Construction was a crucial factor in UMS being appointed, as it means that the building can be taken from concept to completion by the start of the academic year in 2012. As well as the project benefitting from volumetric modular construction's ability to provide benefits in cost and programme reductions, it will also receive enhancements to build quality, improved health and safety on site, a significant reduction in environmental impact and improved through-life performance.

Top 12 UK architectural practice Stride Treglown has successfully collaborated with UMS on numerous projects during the past nine years and are once again involved in the Brunswick House development. Ray Williamson, Divisional Director at Stride Treglown, said: "Brunswick House has been designed to take full advantage of the UMS system, with modular bedrooms, staircases and lift shafts, which enable the project to be delivered faster than a traditional build, with zero defects on completion. The client and its delivery team know exactly what they are going to get, thanks to the factory mock-ups and with fully finished rooms arriving on site so early in the build, risks to the handover date are greatly reduced."

To date, UMS has manufactured and installed over 19,000 volumetric modules into a diverse range of projects, including residential and student accommodation.

# Portaloo launches multi-faith toilet and washing facilities



Quality - this time - next time - every time

Portaloo, part of the Portakabin Group, has launched a specially designed range of multi-faith toilet and washing facilities, which are now available to hire for a wide variety of situations from airports, railway and motorway service stations, to universities, colleges, sports stadia, hospitals and leisure complexes.

The Portaloo Natural and Purity buildings have been developed in response to an increase in demand for "natural position"



toilet buildings and wudu washing facilities. The new Portaloo Natural building provides hygienic natural position/squat toilets, which have a range of features:

- a raised platform with integral drainage for ease of cleaning
- non-slip vinyl flooring, which is both safe and hygienic
- a hand-held cleansing head with coiled pipework
- regulated warm water
- a partitioned lockable cubicle for privacy.



Developed following close consultation with users and facilities management teams, Portaloo Purity provides private and respectful wudu cleansing facilities, used for the Islamic ritual to prepare for formal prayers. The building is a spacious self-contained unit that caters separately for both male and female users. It incorporates:

- easy-to-clean stainless steel fixtures
- individual washing stations
- dedicated entrance doors and separate areas for male and female users
- ergonomically designed seating for all heights
- push-button water control designed to minimise water consumption
- a self-contained water heating system which is energy efficient and provides hot water without the need for a threephase power supply

- flexible temperature regulation
- non-slip flooring with matting
- fan heating with thermostatic controls
- coat hooks and hand dryers.



The first application of the multi-faith personal washing facilities was a project at Brunel University, which had a requirement from students who required a high quality pre-prayer wash room while a major new building was under construction. The interim building was needed to enable students preparing for prayer to wash their face, arms and feet in running water, with separate areas for men and women. Commenting on the project James Sweeney, Estates Manager at Brunel University, said: "The Portaloo building has proved to be a very good option for us. It is likely to remain on campus for around three years and we are confident that the quality of the building will ensure it performs well throughout that time. Our multi-faith student representatives have given us some very positive feedback on the new facility. The project was successful because it was developed in close consultation with end users and the expertise of the Portaloo team enabled us to deliver exactly what our students needed."

Portaloo has been manufacturing high quality toilets and shower rooms for nearly five decades, providing domestic-standard toilets, showers and changing rooms to the strictest hygiene standards, on programme and on budget.

For further information about toilets, washrooms and other buildings for interim use contact: Tel: 0845 200 5555 Email: information@portakabin.co.uk Website: www.portanews.co.uk

### Portakabin awarded four-year framework agreement to supply modular buildings to the public sector

Government Procurement Service, an executive agency of the Cabinet Office, has awarded a four-year framework agreement to Portakabin for the supply of modular buildings to the public sector. The framework agreement simplifies the procurement process for publiclyfunded organisations, significantly reducing both cost and time. As part of the new framework, customers selecting Portakabin will benefit from rapid procurement and cost-effective modular building solutions, avoiding costly, compulsory competitive tendering.



Government Procurement Service is the largest professional buying organisation in the public sector and the only body with a legal remit to trade across the whole of the public sector. In the past year, it managed £7.6bn of customer spend through its procurement arrangements and services, working with 14,500 customers across 1,400 organisations in central Government, health, education, local government and other areas.

This latest framework follows a rigorous, independent assessment of the buildings and services offered by Portakabin, including its assurance of supply, quality management procedures, regulatory compliance, innovation and cost.

The new framework agreement with Portakabin includes the supply of modular buildings for both sales and hire, and for applications such as offices, kitchens and restaurants, education facilities for nursery, primary, secondary and further education, and in the healthcare sector, buildings for consultation, patient accommodation and operating theatres.

Commenting on the new agreement, Robert Snook, Director and General Manager of Portakabin Hire said: "This is one of the most significant framework arrangements in our sector and we are absolutely delighted to have been successful. It follows our work under the previous framework for the past four years and a very rigorous competitive tendering and selection process over recent months. We already supply modular buildings across the public sector, from hospitals to schools, Ministry of Defence sites and local authorities. This new pan-Government initiative will radically reduce procurement time for our public sector customers and deliver significant cost savings."

As a result of the new agreement, public sector organisations and Government departments will have access to the technical expertise offered by Portakabin and a wide range of modular building solutions as well as its network of more than 50 hire centres across the UK.

Government Procurement Service framework suppliers are available to any organisation that is more than 50 per cent publicly funded, as well as private sector specifiers working for the public sector – such as architects, engineers and facilities management companies.

For further information about modular buildings for permanent and interim applications contact: Tel: 0845 401 0010 Email: information@portakabin.co.uk Website: www.portanews.co.uk

### Factoryshare.org

There are many underused factories that have the elements necessary for the delivery of off-site manufactured systems or components, but not the throughput to keep the facility operating at maximum capacity.

Factoryshare.org is an initiative that seeks to make use of the "down time" and/or unused space (the cost of which is otherwise paid for as part of the factory overhead) through several possible scenarios:

 providing manufacturing space for start-up companies wishing to enter the off-site market. These underused areas could be sectioned off and rented



to people, thus saving them the cost of buying, building and developing a new location. It could test the viability of the product without high capital cost

- enabling existing products to be delivered from a range of participating facilities, allowing small operations to upscale their offer or products to be manufactured closer to their point of deployment (will reduce transport time and cost)
- enabling participating facilities to combine and trade capacity to drive down the cost of off-site solutions and move this further into the mainstream of construction delivery.



There are many benefits that such an approach could provide:

- reduced cost of both new and existing systems by offsetting some of the overhead cost
- a central point of contact for clients or contractors who might otherwise not consider an off-site solution, or might not know where to procure one
- subject to issues relating to IP, a potential means of improving collaboration within the off-site sector, with benefits for all (manufacturers, clients and end users)
- by lowering the barriers to participation in the off-site market, many might be developed that would otherwise be seen as too marginal.

### **Caledonian Modular update**

### Caledonian Modular

Caledonian Building Systems has long been at the forefront of UK offsite construction, delivering high profile and industry leading projects such as the 17-storey Paragon Building in London, over 11,000 bedrooms for the military (including Project SLAM), more than 100 projects for the Ministry of Justice, as well as hotel and accommodation schemes.

In 2008, Caledonian acquired ModularUK, a specialist in the education, health and general commercial modular markets. The two companies have worked closely together to provide clients with innovative solutions and the widest industry offering for modular buildings. We have now combined marketing and business development activity so we can continue our commitment to our clients by providing a single point of contact for all modular requirements.

Caledonian Modular is based in Newark, Nottinghamshire, and Driffield, Yorkshire and offers modular solutions across a broad range of sectors including prisons, military, hotels, residential, health and education buildings.

#### For more information go to: www.caledonianmodular.com

### New bathrooms pods division:

Caledonian Modular has launched the new Caledonian Bathroom Pods division, completing the group's one stop shop offer in the design, manufacture and construction of permanent and bespoke modular structures. The Caledonian Bathroom Pods team is led by Jayne Gray, who prior to the creation of the Caledonian Bathroom Pod division, was Manager of Gateway Pods, part of the Britspace Group. Caledonian Bathroom Pods has been created in recognition that for many clients incorporating a modular bathroom pod alone can improve the quality, efficiency and sustainability of projects where the main structure is built with a concrete, steel or timber frame.

For more information go to: www.caledonianmodular.com/ bathroomPods.phpf

**ISO 14001 certification:** Caledonian Modular leads the off-site sector in minimising environmental impacts and are delighted that this dedication has resulted in the award of ISO 14001. This certification recognises success in minimising the environmental impact of operations, compliance with regulations and commitment to continual improvement. With this award, Caledonian Modular's clients and partners can have total confidence in the business commitment and capability for sustainable delivery.

For more information go to: www.caledonianmodular.com/ sustainability.php?id=3

#### Modular construction for education:

summer 2011 saw the Government's response to the recommendations on education funding set out in the James Review. The development of a suite of standardised drawings and specifications for school buildings was highlighted as a recommendation to be moved forwards quickly, and modular construction is well placed to deliver.

For more information on Caledonian Modular's experience and offer for the education sector go to: www.caledonianmodular.com/education. php?id=4

#### The Shetland Islands – project update:

Caledonian Modular has delivered the first phase of an £18m project on the Shetland Islands, working with main contractor Malthus. The modular buildings will provide accommodation and facilities on Sullom Voe for construction workers building a new processing plant for Total E & P UK Ltd and Dong E & P (UK) Ltd. Modular construction was chosen to overcome challenges posed by the remote location of the site. The two storey development, including 424 bedrooms spread over five interconnected blocks, a 3,200m<sup>2</sup> amenity building and 4,200m<sup>2</sup> of office accommodation, is well on the way to completion with the main amenity block and early phases of the bedrooms already handed over, and the final bedrooms due for completion this month.

For more information go to: www.caledonianmodular.com/news/ shetland.php?id=7

### Howick Innovation Conference 2012, New Zealand

The 2012 Howick Innovation conference will feature a wide range of speakers and subjects including live production demos and samples of the latest technology advances in steel frame construction.

Speakers include:

- Richard Ogden MBE, Chairman, Buildoffsite
- Charles Clifton, University of Auckland
- Graeme Stubbings, Speedfloor Composite Concrete Floors

Plus many more.

### Richard Ogden MBE, Buildoffsite

Richard has had a long and distinguished career in the construction sector, particularly working with clients and developers. His employment has included Balfour Kilpatrick Industries, British Rail, British Transport Hotels, Ladbroke Entertainments, McDonald's Restaurants UK Ltd (1980–2002) and McDonald's Europe Ltd (2002–2003).

McDonald's Restaurants UK Ltd pioneered the use of modular construction techniques for their edge of town retail outlets. Richard started with McDonald's as Project Manager on restaurant number 50, progressing to senior PM and establishing the first Regional Office in Birmingham. He became Construction Manager for the National Development Programme and Co-Chair of UK Development Strategy. Ultimately, he became Vice President/Construction Director responsible for Construction Project Management, Architecture, Design and Equipment.

Richard was Chairman of the European Construction Team and a member of the European Development Board, as well as Director of Advanced Building Systems (USA). He was recognised with the International Award of Excellence in 1990 and the Poucher Award in 1994.

Richard spent a lot of his private life encouraging others to look at offsite techniques for themselves. He enjoys working with like-minded people and sharing opportunities for best practice. He was a founder member of the Construction Round Table and a member of the Movement for Innovation (M4I).

Since moving on from McDonald's in 2003, Richard has been an independent consultant, working for a number of organisations:

- Simons Group Ltd consultant to the construction and development businesses
- acumen7 a network of independent consultants, working for Blue Chip and Plc companies in all aspects of construction and developmen, including change-management, business development, off-site manufacturing across retail, and the industrial and government sectors
- DfE member of the working group of Building Schools for the Future. Responsible for defining how the new schools programme will develop in 2005–2015. Expenditure set at £5bn per annum. This will evolve using procurement from both private and public sectors
- Buildoffsite Chairman of the industryled group to encourage the use of offsite construction in both the public and private sectors: www.buildoffsite.com

He was awarded the MBE in the Queen's Birthday Honours 2010.

### Charles Clifton, University of Auckland

Charles will be presenting details on the earthquake performance of steel framed buildings focusing on the lessons learned in Christchurch.

### Graeme Stubbings, Speedfloor

Graeme will be presenting the Speedfloor Composite flooring system and its advantages.

He will also be detailing the new Modular Composite Floor System that can be used for traditional structures and modular units.

To register your interest and to see a short video on the last conference go to: www.innovationconference.co.nz/

### Foremans relocatable building systems provide new school building for Wymondham High



A dedicated sixth form centre is now in use at Wymondham High – a new academy in Norfolk. The scheme has been constructed using a highly sustainable recycled modular building from Foremans Relocatable Building Systems. It was completed ahead of schedule, reducing the programme from receipt of order to less than three months. Designed by architects NPS South East, the project marks the start of a significant new phase in the history of the school. In line with Government policy to increase the number of academies across the UK, Wymondham High now has Academy status.

The additional teaching accommodation was needed as the school caters for over 1,600 pupils, with 400 in the sixth form from the start of the 2011/12 academic year and plans are in place to increase pupil numbers to 2,000.



The purpose-designed facility was craned into position in just one day during the school holidays to minimise disruption to staff and students. The single-storey building accommodates five seminar rooms for students studying social sciences and sixth form facilities, including a break-out area, toilets and administration office. The main contractor was Farrans (Construction) Ltd.



Commenting on the new building, Victoria Musgrave, Principal at Wymondham High Academy said: "This project has definitely exceeded our expectations, and both staff and students are genuinely thrilled with it. They like the ambience it has created, the flexibility of the space and the fact that we now have a dedicated facility for our sixth form. The Foremans team was very helpful, personable and efficient throughout, and the modular solution has given us the very best scheme for our available budget. It was also sufficiently flexible to meet our project-specific requirements and has provided us with a high quality teaching environment, which symbolises the start of a new era for the school."

Louise Robinson, Project Architect at NPS South East, said: "This scheme has changed our perception of modular building. It feels robust and secure and has good sound quality - you would never know it is a modular structure. We are impressed with the finish, particularly externally, and the cladding is crisp and well executed. Foremans' performance was excellent at every stage. The building was installed in just one day and the modular approach gave us the benefit of a critical saving on time. The project had to be delivered in just three months before the start of the new academic year, which was a major challenge. I am pleased to report the school was actually able to move in several days earlier than planned - a significant achievement for the design and construction team."

A collaborative approach was taken to the design of the new building. The most appropriate aesthetic solution for the exterior was discussed at workshops with sixth form design students. Students were keen to use timber from a sustainable source and to introduce colour into the project. The architects worked with Foremans to develop a cladding solution using natural larch, with vertical "windows" cut out to reveal the modular steel structure finished in three colours – jade, heritage green and wedgewood blue.



Wymondham High is a mixed academy specialising in the arts and sciences. Its sixth form has been recognised as "outstanding" by Ofsted and it has been listed as one of the best performing schools in East Anglia.

All Foremans' recycled modular buildings are fully refurbished with new windows, wall linings, partitions, mechanical and electrical services, doors, flooring and cladding to create high quality accommodation for a wide variety of education applications.

The advantages of recycled and refurbished modular buildings for schools, colleges and sixth form centres include:

- a bespoke design to meet specific project and site requirements
- programme times reduced by up to 70 per cent
- a highly cost-effective alternative to new build
- the buildings can easily be expanded, reconfigured or removed if teaching requirements change
- off-site working is maximised for safer, quieter and cleaner sites, and reduced disruption to teaching
- high quality steel-framed modular buildings are built to last and require fewer ground works than traditional sitebased construction – further reducing cost, disruption and programme times.

For further information about recycled and refurbished modular buildings for schools, academies and colleges contact:

#### Tel: 01964 544344

Email: info@foremansbuildings.co.uk

Website: www.foremansbuildings.info

### Foremans launches groundbreaking customer charter and assurance for delivering every project on time – an industry first

Foremans Relocatable Building Systems, the UK's largest supplier of recycled and refurbished modular buildings, has launched a ground-breaking Customer Charter which it believes is an industry first. The new Charter provides an assurance that every building purchased from Foremans will be delivered on time and ready for beneficial occupation. However, in the unlikely event that the agreed completion date is not achieved, Foremans will now refund 1 per cent of the contract value for every week a project is delayed\*. This commitment is believed to be a first for the construction sector.



Commenting on this pioneering initiative, Managing Director of Foremans Mike Williams said: "Companies across the industry claim to offer quality products and services, but we wanted to go a step further by giving our customers even greater peace of mind. We believe our new Customer Charter commitment will set a benchmark in the modular building sector – and indeed across the construction industry, and is further evidence of our confidence that every Foremans building will be delivered consistently on programme, on budget and to the highest standards." Analysis of Foremans' performance over the last three years has shown it has successfully completed 99 per cent of its projects on time and on cost. This performance is in sharp contrast to new industry figures released by Constructing Excellence, which show that just 63 per cent of projects delivered in the past year were on budget and only 45 per cent were completed on programme (source: UK Industry Performance Report 2011, Constructing Excellence/Glenigan).

Foremans scored 94 per cent for service and building quality in its last 200 customer satisfaction surveys, and 100 per cent of its customers said they would recommend Foremans buildings. More than 80 per cent of Foremans' business is also from past customers – another significant endorsement of its outstanding customer service and accommodation solutions.

Every Foremans building is fully refurbished off site at one of its two production centres. Only the steel structure of the building is recycled, adding even more value to the pre-owned modular approach, and reducing programme times by up to 70 per cent compared to new build and new manufacture.

The buildings are reconfigured to exact project requirements and specification, and fitted with new windows, external cladding, wall linings, partitions, M&E services, doors and flooring, creating high quality accommodation for a range of permanent and interim uses.

Foremans building solutions also meet the requirements of the revised Building Regulations Part L2A 2010 (England and Wales) and Section 6 2010 (Scotland).

\* up to a maximum of five weeks. For projects where Foremans' contract value is in excess of £500,000, Foremans will refund a full £5,000 for every week late, up to a maximum of £25,000. Other contract terms apply.

For further information about recycled and refurbished modular buildings contact:

Tel: 01964 544344

Email: info@foremansbuildings.co.uk Website: www.foremansbuildings.info

### New clinic opens in East Yorkshire – constructed using a highly sustainable recycled modular building

A new health centre has opened in the East Riding of Yorkshire, constructed using a highly sustainable recycled modular building from Foremans Relocatable Building Systems. Designed by architects Gelder and Kitchen, the new purpose-designed centre was craned into position in just eight hours over a weekend. The single storey building has been clad in brickwork to complement its location in the historic village of Cottingham – a conservation area.

Since closure of the clinic following the major floods in 2007, health services have been temporarily provided at other locations in the area. The new centre has brought a range of community services under one roof again, including podiatry, consultation, examination and treatment facilities, hearing aid services, child health clinics, and community dental services.

Commenting on the project, Stephen Dale, Capital Projects Manager at East Riding of Yorkshire Primary Care Trust, said: "This is a fantastic building, delivered on time, cost and quality. Foremans' performance was excellent throughout, and the construction and fitting out phases went very smoothly. We had a good relationship with their team, who were happy to go the extra mile to meet our specific requirements. Speed of delivery was important to enable us to reprovide clinical services locally as quickly as possible. The use of a recycled building structure also made our budgets go further, providing excellent value, as well as having a number of strong environmental benefits."

Henry Chadwick, Partner at architects Gelder and Kitchen, added: "We are impressed with the finish and the space the modular approach has created internally. It is spacious and open. You would never know this was a modular building – or indeed a recycled building. The installation was very professional and efficient and the finished scheme sits well in its landscape. This is a really good building, successfully delivered to a tight budget."

All Foremans' recycled modular buildings are fully refurbished with new windows, wall linings, partitions, M&E services, doors, flooring, and cladding, to create high quality accommodation for a wide variety of permanent and interim applications. The recycling and refurbishment of relocatable buildings is also highly sustainable, helping to improve a building's carbon footprint. The approach produces less than 10 per cent of the carbon emissions compared to a newly manufactured building (source: MPBA).

Because much of the refurbishment work takes place off site, the approach generates fewer vehicle movements to site than traditional building methods, reducing congestion and carbon emissions

By refurbishing the building modules and preserving the embodied energy of the steel structure, Foremans is extending the life of the building and minimising the volume of waste sent to landfill.

For further information about recycled and refurbished modular buildings contact:

Tel: 01964 544344

Email: info@foremansbuildings.co.uk Website: www.foremansbuildings.info

### Challenging roof-top extension to Cardiac Catheterisation Unit delivered on time and on budget at Lister Hospital



Award-winning offsite construction specialist, Yorkon, has delivered a challenging project to double capacity of the cardiac catheterisation unit Design Innovation at Lister Hospital in Stevenage, on time

and on budget - its second project at the hospital for the East & North Hertfordshire NHS Trust.

This involved adding a new storey on to the roof of the existing unit that was provided by Yorkon in 2004, which has doubled the size of these life-saving heart facilities and represents a significant £4.5m investment in service delivery for the Trust. The project was phased to maintain use of the existing facility throughout and to keep any disruption to service provision during the construction works to a minimum.



The 24-module extension was installed using a 350-tonne crane and the operation was carried out over a weekend to further reduce any inconvenience to staff and patients. The project also included changes to patient flows and extensive reconfiguration works to the existing laboratory suite, as well as the provision of stairs, lift and an adjacent modular corridor. The building has provided a range of purpose-designed facilities including a second catheterisation laboratory, clinical support areas, control room, preparation and recovery rooms, consulting and examination suites, offices, reception and waiting area.

Commenting on the project, Manu Shah, Lead Capital Project Manager for the scheme at the East & North Hertfordshire NHS Trust said: "This was a complex project and Yorkon performed very well throughout. The installation phase went smoothly and the building was completed to the high standards expected by the Trust. The expanded facility has been welcomed by both clinicians and patients who are benefiting from a building that has been specifically designed for this service.



Speed of construction was a key issue for the Trust, in order to have the new facility up and running as quickly as possible. The Yorkon off-site approach is much faster than traditional site-based building methods. It also requires much less space for construction, which was critical on this site, as the cardiac unit is almost fully enclosed by other buildings so there was little room for the storage of materials, plant and equipment. The second cardiac laboratory suite is now enabling us to provide life-saving cardiac services locally to more people.



By expanding both the unit's capacity and the range of cardiac services available at Lister Hospital, far fewer people need to travel to other hospitals for specialist cardiology treatment. It has also increased efficiency, with better care being provided for patients needing help in an emergency, as well as those with planned treatments. The roof-top extension was installed with partitions, mechanical and electrical services, windows and doors already in place to reduce time on site by around 50 per cent. It is targeted to achieve a BREEAM "very good" environmental rating.

The advantages of off-site construction for healthcare projects include:

- constrained sites with little or no access can be developed, including completely enclosed courtyards and roof-top extensions
- programme times reduced by up to 50 per cent, allowing earlier completion with a positive impact on patient care
- reduced disruption to patients, staff and the local community during construction
- material wastage reduced by up to 90 per cent
- up to 90 per cent fewer vehicle movements to site
- safer, quieter and cleaner construction
- improved quality and reduced future maintenance
- a high level of design flexibility internally and externally
- buildings can be expanded without decanting
- improved thermal efficiency for lower running costs and reduced carbon emissions
- greater cost control.

Yorkon is part of the Portakabin Group. For more information go to: www.yorkon.info